BRUHAT BANGALORE MAHANAGARA PALIKE

YELHANKA ZONE ELECTRICAL DIVISION

Detailed Estimate for Providing LED Street Lights to Veeranna palya, Mariyanna Palya, Coffee board layout, Kempapura colony, Amruthnager and Amruthhalli etc in Ward no 7.

Budget Head .....

Division No..... Estimate No. ..... For Rs. **50,00,000.00**

Sl.No.	SR Page & SL No	Description of Work	Qty.	Rate Rs.	Unit	Amount
1	27/4.36.1	LED Street light. Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs. 50000 hr. @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4 KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI 75+. housing with supplier word mark / name shall be engraved / Embossing on the die cast housing / body part. . Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED source manufacturer. Suitable for A1/A2 Roads as per IS 1944 Part I & Part II. 90 Watts	45	31250.00	Each	1406250.00

2	26/4.35.3	LED Street light.Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminare > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & FixtureEfficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED source manufacture. Suitable for B1/B2 Roads as per IS 1944 Part I & Part II.LED Streetlight 65watts	130	18720.00	Each	2433600.00
3	108/17.12	Supplying and Fixing of.....mm dia class A GI pipe bracket up to 2 mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluorescent tube street light fitting of all capacities to GI or CI or rail or RCC pole / wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires. Using 32mm dia G.I.pipe	166	893.00	Each	148238.00
4	12/2.12.1	Wiring for lighting/power circuit using one of PVC insulated 1100v grade stranded **Aluminium** unsheathed wire single core/multi core cable in open or consealed system of wiring. a)4 sqmm.	500	7.50	Each	3750.00

5	56/7.6.3	Supplying of 1.1kv grade Aerial Bunched cable stranded & compacted Aluminium Phase conductor and Stranded Messenger conductor with all aluminium alloy, Phase conductor is insulated with XLPE compound insulated Messenger with specified IS - 14255:1995 & confirming to GTP of group A. 3X16 + 1X25 + 1X16 sqmm	500	117.00	Per Mtr	58500.00
6	Bes SR	Stringing of 1.1kv LT Arial Bunched Cable, BESCOM SR	500	10.30	Per Mtr	5150.00
7	Bes SR	Piercing connector suitable for 16 sqmm - 95 sqmm AB cable -steel light connection. Bescom SR of 2010-11, Page no 16 of 34, Serial no 51.12.	25	147.00	Each	3675.00
8	Bes SR	Suspension clamp assembly 25 to 95 sqmm bare messenger. Bescom SR of 2010-11, Page no 16 of 34, Sl no 51.17.	25	280.00	Each	7000.00
9	Bes SR	Dead end clamp / Anchor clamp assembly 25 to 95 sqmm bare messenger, Bescom SR of 2010-11, Page no 16 o 34, Sl no 51.16.	4	140.00	Each	560.00
10	Bes SR	Erection of Suspension Clamp - 25 to 95 sqmm bare messenger. Bescom SR of 2010-11, Page No 21 of 27, Sl No 26.6.	25	85.00	Each	2125.00
11	Bes SR	Fixing of Universal Hook. Bescom SR of 2010-11, Page No 22 of 27, Sl no. 26.10.	25	85.00	Each	2125.00
12	55/7.4.4	Supplying of LT UG cable having aluminium conductor PVC insulated, sheathed, galvanished, steel wire/steel tap armoured cable with PVC outer sheating 1.1 KV class.I. Class 'A' PVC Cable. 4 core 16 sqmm	200	140.40	Per Mtr	28080.00
13	61/7.8.2	Labour charges for lying of 1.1 KV class UG cable when supplied agency in existing trench Gl pipe / stoneware pipe / on wall /on pole as required. I. In existing trench/duct.b)25sqmm to 75 sqmm	200	16.20	Per Mtr	3240.00
14	62/7.9.1	Digging of trench of 0.6 m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc.,complete. (As perCivil SR KSRB l-2, P-7).a) In soil (ordinary)	160	78.00	Per Mtr	12480.00
15	34/5.11	Supplying and stringing of ACSR Conductor (6/2.59mm Al +1/2.59mm Steel).	1700	30.00	Per Mtr	51000.00
16	34/5.91	Supplying and Fixing .....including all Hardware's etc. complete as per the standard technical specification of BESCOM. A)1.1 KV Pin Insulator	49	44.00	Each	2156.00
17		No. 8 Strain Insulator	9	14.00	Each	126.00
18	33/5.85	Supplying and Fixing ..... including all Hardware's etc. complete as per the standard technical specification of BESCOM. RCC Clamp	80	84.00	Each	6720.00

19	33/5.42	Supply and fixing of .....cross arm including all Hardware's complete as per the standard technical specification of BESCOM. 2 Pin 45x45x5mm - 510mm	72	306.00	Each	22032.00
20	47/6.16.6	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.f)40-63Amps TPN, Group A	4	1936.00	Each	7744.00
21	6.16.1	5-32Amps SP	8	418.00	Each	3344.00
22	19. 32/9	Supplying and fixing electro mechanical timer (without contactor) using necessary bolts, nuts and washers etc.. Group A, PWD SR 2006-07,	4	4200.00	Each	16800.00
23	46/6.12.4	Supply and fixing of 4-pole power contactor with NO/NC contacts on existing wood / panel board using necessary bolts, nuts, washers and wiring etc., complete. d) 100-125 Amps	4	9915.00	Each	39660.00
24	6/2.6.7	Wiring for lighting/power circuit using one of PVC insulated 1100v grade, multis and **Copper** conductor single core cable in open or consealed system of wiring.I Group A Materials.g)16 sqmm	25	132.60	Per Mtr	3315.00
25	17/3.10	Supplying and fixing phylum brand hand plastic sheet 3mm thick with necessary niches for fixing switches, regulators etc., and fixing on exisiting wood or metal box using N.F.screws	18000	0.22	Sqcm	3960.00
26	49/6.39.1	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. And M.S. flat... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. a)40X40X6mm	24	263.00	Per Mtr	6312.00
27	49/6.40.2	Fabricating supplying and mounting MS box made out... SWG suitable for floor/wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size cdlamps with necessary cable entry pipe with gland and box should be finished with 2 cdoats of red oxide primer paint and finally finished with approved colour enameled metal pain etc., complete. b)16 swg	82000	0.33	Sqcm	27060.00
28	108/ 17.5	Fixing halogen/ metal hallide /SVL/IL/LED flood light fittings over existing pole/ wall ceiling including clamps bolts nuts and wiring using sitable capacity wires	150	176.00	Each	26400.00
29	106/ 16.21.2	Supply and fixing of 230 volts Porcelain holder for MV/SV/MH lamp. 250-400Watts lamp Holder	12	184.00	Each	2208.00

30	106/16.2 3.1	Painting of existing street light pole after scrapping the old paint and painted with suitable colour enamel/Silver paint including coping/footing of the pole.Upto 5Mtr street light pole.	88	500.00	Each	44000.00
31	21/4.12	Supplying 70Watts MH integral post top lantern Metal halide fitting suitable for pole mounted with fully vermin, weather proof, elegant in shape, appearance, UV stabilized clear acrylic diffusers, camouflaged horizontal lamp, holder and lamp, IP 54 protection. Electrical safety class 1. The fitting shall have ferromagnetic copper choke with capacitor, igniter and fully wired to operate on 230V 50Hz AC Supply with 70Watts MH Lamp.	28	6724.00		188272.00
32	33/5.2.2	Supply and erection of .....Mtr RCC Pole including earth work etc,. complete as per the standard technical specification of BESCOM8Mtr 145Kg WL	10	6047.00	Each	60470.00
		total Rs				4628858.00
		KRIDL Charges 8%				370308.64
		Mislenious				331333.36
		Total				**5000000.00**

CERTIFICATE

1. The Place was inspected and work is essential.
2. The Provision made in the estimate is adequate and are necessary.
3. The Work comes in the BBMP limit and is legitimate charges on the Corporation Funds.
4. The rates in the Estimate is based on PWD (Elec) SR of 2014-15 .

K.N. Reddy
Jr/Asst. Engineer (Elec)

Asst. Exe.Engineer (Elec)
yelhanka zone
Bruhat Bangalore Mahanagara Palike

EXECUTIVE ENGINEER (ELEC)
YELHANKA ZONE
BRUHAT BANGALORE MAHANAGARA PALIKE

Administrative Approval
Accorded For ..50.00 lakhs
Head of A/C..8190.....
CER NO :.....06..... Dt:05.04.2016

TA CE (YNK)

ADMINISTRATIVELY SANCTIONED FOR Rs. 50.00 lacs
Rupees fifty lacks only
Under 8-0190
Regarding ...
Subject to ... mentioned in
enclosed ...
Dt ...
J.C(4) AS/000/01/16-17
dated 5-4-2016 Rs. 50.00 lacs

Joint Commissioner
(Yelahanka Zone)
BBMP, Bengaluru-92